# INTO THE 21st CENTURY
# A Strategy for Affordability

**Letter from Dr. Jacques S. Gansler dated January 20, 1999**

We are facing an unprecedented challenge to modernize our forces in a world that demands more efficient as well as more effective acquisition. To meet that challenge, we are engaged in the Revolution in Business Affairs. As articulated in the Defense Reform Initiative, the key elements of the Revolution in Business Affairs will help deliver needed, modern systems and support services to our warfighters -- better, faster, and cheaper. The goal is to provide the resources and processes for effective warfighting capability in the next decade.

For this next phase of acquisition reform, we must further adapt the best world class business and technical practices to our needs, rationalize our infrastructure, restructure our support systems, and reduce cycle times and ownership costs while simultaneously improving readiness. The Defense Systems Affordability Council (DSAC) is our forum for setting and monitoring top level goals, objectives, and metrics for these areas -- metrics which must be mirrored in each and every DoD acquisition organization, whether it be a program office acquiring a new system or a logistics organization supporting a fielded system.

To be successful, several changes are needed in DoD's management, business, and technical practices. Many changes are underway; others are just starting. We ask you, the reader, to focus on our challenge. Think about the efficiencies and improvements the commercial sector is making and ask "How can we apply them?" We all must rededicate ourselves to more aggressive change. We will make mistakes along the way. And we may be criticized for these mistakes, but dramatic effects can only come when we take and manage risks and begin to act more as the competitive, commercial sector does.

Our workforce is the principal source of the innovation to achieve our goals. Thus, we must provide our workforce with continuous education and training to meet the challenges of the new business paradigms. The old way of detailed government engineering and extensive technical oversight must be replaced by strong, technical management and better use of incentives.

We have already begun to achieve significant results in improving products and lowering their cost. This strategy seeks to reaffirm a close partnership across the Department to accelerate the process. We are actively soliciting your help and ideas on changes needed at all levels. (E-mail us at feedback@acq.osd.mil) We have an open door for your ideas and will support you. All of us need to bring about a revolution in the way we do business.

**Signed by Dr. Gansler**

## Introduction

The Deputy Secretary of Defense chartered the Defense Systems Affordability Council (DSAC) to develop and guide the implementation of an integrated DoD strategy for better, faster, cheaper modernization. In this leadership role, the DSAC has enumerated three top level goals for the Department:

- Field high-quality defense products quickly; support them responsively.
- Lower the total ownership cost of defense products.
- Reduce the overhead cost of the acquisition and logistics infrastructure.

The DSAC is organized to achieve these goals. It is led by the Defense Acquisition Executive, and makes decisions based on a consensus of its members -- the Service Acquisition Executives and other senior policy makers from the acquisition, logistics, comptroller, programming, and requirements communities.

These three goals interrelate in a strategic way. They seek to remove the barriers to change and improve the Department's ability to be innovative in order to improve readiness and accelerate modernization.

Goal 1 will reduce the cycle time of DoD processes for acquisition (including development) and support. Success will act as a catalyst for reducing costs across the board while improving readiness and responsiveness to changing situations. Goal 2 will reduce the total ownership costs of systems. By reducing the investment cost for new systems, the purchasing power of modernization funding will increase. By reducing the operating and support costs for fielded systems, more resources can be made available for modernization and readiness. Goal 3 will reduce the overhead costs of systems providing acquisition and support. Efficiencies achieved can be reallocated for modernization or essential support.

Process change is needed to achieve the objectives for each of these goals. Metrics and incentives are needed to drive change. Implementing change and measuring results are the combined responsibility of the Office of the Secretary of Defense, the Services, the Joint Staff, the Defense Agencies, and industry. We have already begun to achieve significant results in improving the products and lowering their cost. This document seeks to communicate these goals to accelerate the process.

## Goal #1: Field High Quality Defense Products Quickly; Support Them Responsively

The United States commercial sector has demonstrated an ability to develop, produce, and service low cost, quality products in significantly less time than it did 10 years ago. The defense sector has not kept pace. Budget reductions and program instability are often cited as the reasons, but that explanation avoids the fact that the defense industry needs to make the same productivity gains achieved by the private, commercial sector. The ability of the United States to preserve its technological advantage is at risk because our modernization, modification, and logistics support cycles are so long. Because much of this technology is available commercially, potential adversaries may field it first. When DoD fields a new weapon system today, many embedded subsystems are obsolete. We cannot continue to have 10-year weapon acquisition cycles when the underlying technology becomes obsolete in two to five years or less. Similarly, we can not afford logistic support cycles many times longer than the commercial counterparts. Top-level DSAC objectives are shown below.

(1) The average systems acquisition cycle time (measured from program start to initial operating capability) for all program starts in FY 1999 and beyond will be 50% shorter than historical averages.

(2) Reduce logistics response time from an average of 36 days (in FY 1997) to under 18 days by FY 2000, with a stretch target of five days by FY 2005.

(3) Reduce the repair cycle times for end items and reparable parts by 10% by FY 2000 and by 25% by FY 2001 compared to FY 1997 baselines.

Although many initiatives affect cycle time, the following two initiatives will be major contributors to achieving these objectives:

- Establishing Accelerated Cycle Time Processes as the Norm: Improving the acquisition process to make better use of evolutionary defense acquisition, integrated product and process development, modeling and simulation, and other information system capabilities is not sufficient. Better partnerships involving users; the programming, budgeting and requirements communities; the basic and applied technology base developers; and test and evaluation communities are also vital. These partnerships are crucial, not only in changing cultures, but also for providing program stability that is essential in meeting these objectives. When funding changes occur, it is incumbent upon the program manager, in concert with the warfighter, to develop restructured program plans with an emphasis on maintaining schedule. Cycle time must be “actively managed.” It must become a planning constraint defined early in a program and enforced at all levels throughout all interacting organizations.

- Re-engineering the Logistics System: We have a logistics system that costs too much and takes too long. Advanced information systems and rapid transportation are keys to lowering cost while improving readiness and

performance. We also need to reform our inventory management systems and practices (to focus on suppliers, not supplies) and adapt commercial distribution systems to satisfy material requirements. Commercial products today are delivered worldwide in a few days.

## Goal #2: Lower the Total Ownership Cost of Defense Products

Total ownership cost of a weapon system encompasses development, production, operations, support, and disposal. The DSAC believes costs in all ownership cost categories are too high and can be reduced substantially if we better emulate the best practices of the public and private sectors. Our initial approach is to set and achieve total ownership cost reduction targets in a series of pilot programs. Targets will be extended to all programs and become increasingly more aggressive as lessons learned are applied across all systems. DSAC top-level objectives are shown below:

(1) For systems in acquisition, surpass or achieve aggressive "Cost as an Independent Variable" unit cost and total ownership cost targets (that are 20-50% below historical norms) for at least 50% of programs by FY 2000.

(2) For fielded systems, reduce the logistics support cost per weapon system per year compared to FY 1997 baselines as follows: 7% by FY 2000; 10% by FY 2001; and a stretch target of 20% by FY 2005. The FY 1997 baseline total is $82.5 billion.

In addition to the cycle time reduction activities, the following important activities will contribute to achieve these objectives:

- Integrating the Civil and Military Industrial Bases: The commercial sector is using processes that have improved product quality and customer acceptance while maintaining or lowering costs. To control its rising costs, DoD and the defense industry must adopt the best practices of both the private and public sectors. We will promote the best practices from both the commercial and defense industries and from the Government (e.g., prime vendor, competitively sourced product support, integrated supply chains, Lean Aerospace Initiative best practices and the Navy Best Manufacturing Practices). We will move from a cost-based purchasing system to one based on price. We will make it more attractive for commercial companies to compete for DoD business, removing barriers that discourage their participation. Acquisition Reform initiatives, such as the elimination of military specifications and use of commercial practices, processes, and items, are steps in this direction. Giving total systems performance responsibility to industry has already led to improved performance at lower cost. Giving responsibility for processes to industry through such initiatives as Performance Based Business Environment, Single Process Initiative, and Open Systems has also reduced costs further. As use of these initiatives is expanded, the additional competition will lead to increased performance and readiness coupled with declining costs.

- Giving New Authorities to Program Managers of Both New and Fielded Systems: Program managers' accountability for life cycle issues can be improved by increasing visibility into related processes, giving them either direct control or, as a minimum, a strong influence over tradeoffs among research and development, acquisition, operating, and support costs. They must be held directly accountable for resources they directly control. Where operational or economic considerations dictate sharing of resources, individual Program Managers must be held accountable for clear and timely articulation of actions to reduce life cycle costs of their systems. Continuing partnerships involving the users, developers, and the support establishment will produce the best value for the available resources. Reducing the cost of fielded systems, while improving readiness, is an especially difficult but very important challenge. Improving reliability and maintainability through continuous technology refreshment will make major headway on reducing demand for support. Reducing demand, however, is not enough: we must also reduce the cost of delivering support -- which means smart and aggressive support process re-engineering. The key to this re-engineering is being able to optimize across functional stovepipes rather than sub-optimize within them. The program managers for fielded systems, using their new authorities, are in the best position to work with functional managers and operating commands to capitalize on the re-engineering opportunity.

## Goal #3: Reduce the Overhead Cost of the Acquisition and Logistics Infrastructure

Since the DoD budget is likely to remain essentially constant for the foreseeable future, additional funds to meet critical modernization needs cannot be anticipated. Therefore, consistent with the Department's National Performance Review commitments, the DSAC's goal is to increase the funds available for modernization by almost 50 percent from recent lows ($40 billion). This increase will be achieved by reducing the requirements for logistics and other infrastructure funds -- while simultaneously maintaining capability and increasing readiness levels. To measure our progress in achieving this goal, the DSAC has established the following objectives:

(1) Reduce the funding required by logistics (see Goal 2, Objective 2) and other infrastructure from 64% of Total Obligation Authority (in FY 1997) to the following: 62% by FY 2000; 60% by FY 2001; and a stretch target of 53% by FY 2005.

(2) Achieve annual defense procurements of at least $54 billion by FY 2000 and $60 billion by FY 2001.

Beyond the ownership cost initiatives articulated under Goal 2, we intend to achieve these objectives principally through the following activities:

- Using People and Resources Efficiently: More of the weapon system development, production, and support functions will be "competitively sourced." The DoD has a minimum set of functions only it can perform. Those functions -- combat, policy formulation, management of resources, and oversight -- must be retained. All other functions should be performed organically only if DoD is more efficient and effective than the private sector. The United States private, commercial sector has proven itself to be very competitive in the world today. If we take advantage of these efficiencies, private and government costs can be reduced and funds can be shifted to modernization. There is no bias towards privatization. We want to use those resources that are most efficient and effective. As a key step in determining this, DoD will aggressively pursue advanced cost management techniques used in the commercial sector such as Activity Based Costing (ABC) and Activity Based Management (ABM).

- Reducing DoD Infrastructure: The Secretary of Defense intends to continue to reduce the DoD infrastructure by restructuring facilities. Retaining excess capacity wastes resources that can be directed to modernization. As weapon systems development, production, and support are competed, some current capacity will become excess.

## Implementation

Meeting the DSAC top-level goals depends on the cooperation, support, and leadership of the Service Acquisition Executives (SAEs), Deputy Chiefs of Staff for Logistics (DCSLogs), Program Executive Officers (PEOs) and program managers (PMs), the supporting System and Materiel Command (SYSCOM) Commanders, the Defense Agency heads (DAHs), and every individual in our workforce. However, the acquisition and logistics workforce cannot be successful alone -- the Joint Staff (JS) and Service requirements, programming, and budgeting communities must contribute. The DSAC will provide the top-level leadership; however, it is up to every involved individual to manage and direct all of his or her activities toward these common goals and objectives. The following principal responsibilities and implementation steps are critical.

Communicate the Strategy: The DSAC will communicate this strategy to the entire acquisition and logistics workforce. The Under Secretary of Defense for Acquisition and Technology USD(A&T), SAEs, DCSLogs, DAHs, PEOs, SYSCOM Commanders, and PMs will incorporate the ideas laid out in this strategy in every appropriate public forum they address. Testimony and interactions with the Congress will include the DSAC strategy and the implementation results.

Industry will be incentivized to become a partner in the strategy and will be asked to endorse the message to its workers. A thorough understanding and acceptance of the related metrics by industry is a key to the success of implementation.

Organize Effectively: The USD(A&T) will ensure that enterprise-level goals, objectives, and metrics are established, measured, and become acquisition policy. The SAEs, DCSLogs, and DAHs will establish and monitor complementary goals, objectives, metrics, and necessary incentives that apply to all programs supervised by PEOs as well as Service and Agency level processes. The metrics developed in the Lean Aerospace Initiative's Lean Enterprise Model, already used by a large segment of the defense industry, may be useful for measuring progress.

The SAEs and Overarching Integrated Product Teams (OIPTs) will ensure that enterprise goals and objectives are reflected in the plans for all programs requiring Defense Acquisition Board (DAB) oversight. OIPTs preparing for sessions of DABs will ensure that the strategy is a part the acquisition plans, goals, metrics, and incentives for all programs they assist and review. The SAEs and Designated Acquisition Commanders will also include the goals, objectives, metrics, and incentives in all programs that do not require DAB review.

The USD(A&T) will work with the Joint Requirements Oversight Council, Commanders-in-Chiefs, operational commands, and Defense Agencies to routinely incorporate cost performance tradeoffs in their requirements documents. Targets for unit production and operations and support costs must become the

norm. Both will work to improve implementation of "Cost as an Independent Variable (CAIV)" processes for making cost performance tradeoffs.

The USD(A&T), the SAEs, the DCSLogs, and DAHs will interface with the programming and budgeting communities to ensure a viable process is established to resource, implement, and evaluate progress on the goals and objectives.

The DSAC Associated Groups will ensure their priorities include focusing their attention on the critical process-related initiatives that have the greatest potential impact on the enterprise-level goals. The DSAC Associated Groups will also establish time-phased goals, objectives, and metrics for these initiatives. The DSAC Associated Groups will also support both the establishment of incentives and the removal of the disincentives for achieving the goals.

The SAEs will designate pilot programs as agents of change. These pilot programs, along with the CAIV Flagship programs, will demonstrate how initiatives contribute to the goals, objectives, and metrics.

Continuously Educate and Train the Acquisition Workforce: The Office of the Secretary of Defense will support the education and training of our workforce to ensure that these goals and objectives are achieved. The Defense Acquisition University will incorporate the rationale for the strategy, goals, and metrics into all acquisition courses and report progress to the DSAC. The SAEs will require SYSCOM Commanders to incorporate the rationale for the strategy, goals, and metrics into all courses under their direction. The SYSCOM Commanders will report progress to their SAEs. A unified (Services and Defense Acquisition University) report on education and training will be provided to the DSAC every 6 months. Industry will be encouraged to include the strategy and goals in training it provides its workers.

Monitor Progress and Update: Progress reports will be provided at DSAC meetings. The SAEs and DCSLogs will report how well performance measurements relate to target objectives. The PMs for pilot programs will report progress at least once a year to the DSAC and forums such as the PEO/SYSCOM Commanders' Conference. The following topics will be reported as a minimum: 1) progress in achieving goals and objectives, 2) metrics and incentives, 3) lessons learned, and 4) best practices. The PMs of the pilot programs will transfer their knowledge and experiences to other DoD programs. The DSAC will be responsible for reporting or modifying top level goals, objectives, and metrics. The DSAC will provide periodic reports to all members of our workforce.